



WHITHAM, CURTIS, CHRISTOFFERSON & COOK, P.C.
INTELLECTUAL PROPERTY LAW

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To: **Examiner Susan Y. Chen** **FAX No.:** **(571) 273-8300**
GAU 2161 **Tel. No.:** **(571) 272-4016**

From: **Laurence E. Stein** **FAX No.:** **(703) 712-7557**
Tel. No.: **(703) 712-5130**

Re: **Serial No. 10/663,907**

Number of Pages (including this cover sheet): 7

Comments:

Attached are the Topics for Interview for the subject patent application.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Ying Tat Leung

Confirmation No.: 2648

Serial No. 10/663,907

Group Art Unit: 2161

Filed: 09/17/2003

Examiner: Chen, Te Y

For: **DIAGNOSIS OF EQUIPMENT FAILURES USING AN INTEGRATED APPROACH OF CASE BASED REASONING AND RELIABILITY ANALYSIS**

TOPICS FOR INTERVIEW

Sir:

Applicants' undersigned counsel appreciates the Examiner's courtesy in agreeing to a scheduled telephonic interview with the undersigned response at 3:00 PM EDT May 16, 2007. The proposed amended claims are attached.

1. The claim 1 invention is a method receiving an equipment failure report and, in response, generating a list of the most likely failed components based on a combination of two probability calculations –
 - a. a statistical reliability probability, which is simply the conditional probability, for each component of an equipment, of the component having a failed state given an equipment failure; and
 - b. a case based probability, which matches description fields of the equipment failure report against the description fields of past records of equipment failure reports.
2. The proposed amended claim 1 explicitly identifies "component" as "hardware-based," thereby removing the basis for the Section 112 rejection.
3. Dahlquist (now U.S. Patent No. 7,213,174) teaches nothing of calculating probabilities of which components have failed based on a combination of: (a) statistical reliability probability and (b) case based failure probability.
4. Dahlquist, to the extent it can be understood, appears to teach a two stage diagnostic system which first classifies an event into a discrete class and then, after such classification, performs a "root cause" analysis. Dahlquist describes

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the "root cause" analysis as having, in its array of options, a "Bayesian network" and a case-based reasoning. See Dahlquist, at column 7, lines 21-36, and at column 8, lines 6-16.

5. Dahlquist discloses nothing of its "Bayesian network," or anything else, embodying the claim 1 statistical reliability-based component failure probability database.
6. Dahlquist discloses nothing of its "Bayesian network," or anything else, performing the claim 1 calculating, for each component of an equipment, the conditional probability of the component having a failed state given an equipment failure.
7. Dahlquist discloses nothing of the claim 1 receiving a failed equipment having a text description of a failure and matching the text description against the text description field of past equipment failure.
8. Dahlquist discloses nothing of the claim 1 diagnosing which components are most likely to have a failed state by combining the component's probability of failure based on statistical reliability and a case-based reasoning probability of the component having a failed state.
9. The claim 6 invention includes, in combination with other limitations, processor and database limitations corresponding to the method limitations of claim 1.

Respectfully submitted

Lawrence E. Stein
Reg. No. 35,37

Whitham, Curtis, Christofferson & Cook, P.C.
11491 Sunset Hills Road, Suite 340
Reston, VA 20190,
703-787-9400 (voice) , 703-787-7557 (fax)